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| APPLICATION NO.              | FILING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|------------------------|----------------------|---------------------|------------------|
| 09/965,267                   | 09/27/2001             | Brian Alan Batke     | 01AB071             | 3455             |
| 7590 03/02/2006              |                        |                      | EXAMINER            |                  |
| Alexander M. Gerasimow, Esq. |                        |                      | NGUYEN, DUSTIN      |                  |
| Rockwell Auton               | nation ( Allen-Bradley | Co., Inc.)           |                     |                  |
| 1201 South Second Street     |                        |                      | ART UNIT            | PAPER NUMBER     |
| Milwaukee, WI 53204          |                        |                      | 2154                |                  |
|                              |                        |                      | D                   | _                |

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.                     | Applicant(s) |  |  |  |  |  |
|---|-------------------------------------|--------------|--|--|--|--|--|
| Office Action Comments  | 09/965,267                          | BATKE ET AL. |  |  |  |  |  |
| Office Action Summary   | Examiner                            | Art Unit     |  |  |  |  |  |
|   | Dustin Nguyen                       | 2154         |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |                                     |              |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                     |              |  |  |  |  |  |
| Status  |                                     |              |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 08 L   | December 2005.                      |              |  |  |  |  |  |
| ,   | s action is non-final.              |              |  |  |  |  |  |
| ,   | ·—                                  |              |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |                                     |              |  |  |  |  |  |
| Disposition of Claims   |                                     |              |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.   |                                     |              |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                                     |              |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |                                     |              |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-18</u> is/are rejected.   |                                     |              |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |                                     |              |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | <u> </u>                            |              |  |  |  |  |  |
| Application Papers  |                                     |              |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |                                     |              |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |                                     |              |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                                     |              |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |                                     |              |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |                                     |              |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |                                     |              |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:  |                                     |              |  |  |  |  |  |
| 1. ☐ Certified copies of the priority documents have been received.   |                                     |              |  |  |  |  |  |
| Certified copies of the priority documents have been received in Application No   |                                     |              |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |                                     |              |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |                                     |              |  |  |  |  |  |
| * See the attached detailed Office action for a list  | of the certified copies not receive | ed.          |  |  |  |  |  |
|   |                                     |              |  |  |  |  |  |
|   |                                     |              |  |  |  |  |  |
| Attachment(s)   |                                     |              |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |                                     |              |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)   |                                     |              |  |  |  |  |  |
| Paper No(s)/Mail Date  6) Other:  |                                     |              |  |  |  |  |  |
|   | <u> </u>                            |              |  |  |  |  |  |

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#### **DETAILED ACTION**

1. Claims 1 - 18 are presented for examination.

## Response to Arguments

2. In view of the Appeal Brief filed on 12/08/2005, PROSECUTION IS HEREBY REOPENED. A non-final Office Action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 4. Claims 1-4, 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. [ US Patent No 5,854,901 ], in view of Cudak et al. [ US Patent No 5,862,452 ].
- 5. As per claim 1, Cole discloses the invention substantially as claimed including a method for a probing entity to detect a duplicate IP address, the method comprising:

sending one or more first ARP probes onto the network with which the probing entity desires to interact [i.e. ARP request ] [52, Figure 3; and col 1, lines 56-59];

determining whether a response to the first ARP probes indicates that there is a duplicate IP address conflict [ i.e. ARP response ] [ 54, Figure 3; Abstract; and col 3, lines 54-64 ]; determining whether the probing entity is connected to an active network [ col 5, lines 1-25 ];

sending one or more second ARP probes onto the network with which the probing entity desires to interact [i.e. several ARP request] [29, Figure 5; and col 4, lines 33-38]; and determining whether a response to the second ARP probes indicates that there is a duplicate IP address conflict [col 2, lines 20-28].

Cole does not specifically disclose

generating an identifying value that identifies a random period of time to wait before probing a network with which a probing entity desires to interact;

waiting a random period of time related to the identifying value.

Cudak discloses

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generating an identifying value that identifies a random period of time to wait before probing a network with which a probing entity desires to interact [ i.e. random number generator for generating random number ] [ 206, Figure 2; Abstract; and col 3, lines 48-57 ];

waiting a random period of time related to the identifying value [ i.e. transmitting when random number is equal to zero ] [ Abstract; and col 3, lines 35-40 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Cole and Cudak because Cudak's teaching of generating random number would provide low complexity dynamic persistence for random access by a peripheral device [Cudak, col 2, lines 33-35].

- 6. As per claim 2, Cole discloses sending ARP probes until the probing entity is connected to an active network [72, Figure 4; and col 5, lines 42-56].
- 7. As per claim 3, Cole discloses not employing the potentially duplicate IP address until after all the processing associated with claim 2 has been completed [i.e. assign] 74, Figure 4].
- 8. As per claim 4, Cole does not specifically disclose wherein the length of the random period of time is generated by examining at least one of a GUID, a physical address, an IP address and a counter. Cudak discloses wherein the length of the random period of time is generated by examining at least one of a GUID, a physical address, an IP address and a counter [Figure 1; and col 3, lines 22-35]. It would have been obvious to a person skill in the art at the

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time the invention was made to combine the teaching of Cole and Cudak because Cudak's teaching would prevent congestion and avoid collision for sending information in a network.

- 9. As per claim 11, Cole discloses wherein determining whether a probing entity is connected to an active network comprises at least one of (1) analyzing network traffic received by a network interface associated with the probing entity, (2) analyzing electrical signals received from hardware associated with the network with which the probing entity desires to interact and (3) analyzing BPDUS (Bridge Protocol Data Units) received by a network device associated with the network with which the probing entity desires to interact [ col 8, lines 55-67 ].
- 10. As per claims 12-14, they are rejected for similar reasons as stated above in claims 1-3.
- 11. As per claim 15, it is rejected for similar reasons as stated above in claim 1. Furthermore, Cole discloses a probe generator [ col 5, lines 56-64 ].
- 12. As per claim 16, it is rejected for similar reasons as stated above in claim 11.
- 13. As per claims 17 and 18, they are rejected for similar reasons as stated above in claim 15.

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14. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. [ US Patent No 5,854,901], in view of Cudak et al. [ US Patent No 5,862,452], and further in view of Matsukawa [ US Patent No 6,925,079].

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- ARP probes contain the physical address of the probing entity and a potentially duplicate IP address. Matsukawa discloses wherein the one or more first ARP probes contain the physical address of the probing entity and a potentially duplicate IP address [ i.e. MAC address and check target IP address ] [ Figure 2; Abstract; col 3, lines 4-8 and lines 14-17; and col 5, lines 1-10 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Cole, Cudak and Matsukawa because Matsukawa's teaching would allow to detect a network fault due to IP address duplication and hence network manageability improves [ Matsukawa, col 4, lines 19-22 ].
- 16. As per claim 6, Matsukawa discloses wherein the response to the first ARP probes contain the physical address of the probing entity, the physical address of a responding entity, the IP address of a responding entity and the potentially duplicate IP address [ Figure 2; and col 3, lines 24-31].
- 17. As per claim 7, Matsukawa discloses wherein determining whether a response to the first ARP probes indicates that there is a duplicate IP address conflict comprises comparing the

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potentially duplicate IP address of the response to the potentially duplicate IP address associated with the probing entity [ col 1, lines 44-57 ].

- 18. As per claim 8, it is rejected for similar reasons as stated above in claim 5.
- 19. As per claim 9, it is rejected for similar reasons as stated above in claim 6.
- 20. As per claim 10, it is rejected for similar reasons as stated above in claim 7.
- A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached at (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen

Examiner

Art Unit 2154

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNICORY CENTER 2100